Tidal Researches. By William Ferrel, A. M. (U. S. Coast Survey Report, Appendix.) Washington, 1874. 4to. 268 pp.

Elements of the Differential Calculus, founded on the Method of Rates or Fluxions. Part First. By J. Minot Rice and W. Woolsey Johnson. J. Wiley. New York. 1874. 8vo. 66pp.

A Treatise on Electricity and Magnetism, by James Clark Maxwell. Two Vols. Macmillan. New York. 1873. 8vo. 425, 444 pp. $10.00.

A History of the Mathematical Theories of Attraction and the Figure of the Earth, from the time of Newton to that of Laplace. By I. Todhunter. Two Vols. Macmillan. New York. 1873. 8vo. 476, 508 pp. $12.00.

Researches in the Calculus of Variations, principally on the Theory of Discontinuous Solutions. By I. Todhunter. Macmillen. New York. 8vo. $3.50.

An Elementary Treatise on Curve Tracing. By Percival Frost. Macmillan. New York. 8vo. $6.00.

A Treatise on the Theory of Friction. By John H. Jellet. Macmillan. New York. 8vo. $4.00.

Introduction to Quaternions, with numerous Examples. By P. Kelland and P. G. Tait. Macmillan. New York. 8vo. $3.00.

Papers on Electrostatics and Magnetism. By Sir Wm. Thomson. Macmillan. New York. 8vo. $9.00.

B. Westermann & Co., 524 Broadway, New York, are the agents for the sale of the Smithsonian publications, of whom each paper can be got separately if desired.

NOTES.—Dr. David S. Hart, Stonington, Conn., writes—"I think the alteration from a monthly to a bi-monthly a good measure. The first periodical of this kind, published in this country, was the "Mathematical Correspondent" edited by George Baron and issued annually; the second was the Analyst edited by Dr. Robert Adrain, also published annually; the third was "Nash's Diary," edited by Michael Nash, also issued annually; the fourth was the "Mathematical Diary," edited at first by Dr. Adrain, and afterward by James Ryan, issued semi-annually; the fifth was the "Math'l Miscellany," edited by Prof. Charles Gill, also issued semi-annually; the sixth was the "Mathematical Monthly," edited by J. D. Runkle, issued monthly. Besides these there were issued two or three ephemeral serials, one of them by John D. Williams, who published 14 Challenge Problems, directed against Samuel Ward, (Editor of an American edition of "Young's Algebra), James Ryan, Patrick Lee, and others. Six of these problems are impossible.

Besides the above named periodicals, there are now issued quite a number of Educational periodicals, each having a Math'l Department, and, last, but not least, the "Yates County Chronicle," a weekly paper, having a Mathematical Department under the direction of Dr. Samuel H. Wright."

Prof. N. R. Leonard, of Iowa State University at Iowa City, writes—"A very large and brilliant fire-ball passed this place at 10–30 yesterday evening (Feb. 12th)—its size apparently half that of the moon—its course slightly north of west, and marked by a brilliant and broad train of light and by three separate explosions, and followed at an interval of three minutes by a report that some compared to a fusilade of musketry, others to the rumbling of a train of cars.

SOLUTIONS OF PROBLEMS IN NUMBER 1, *VOL. II.*

Solutions of problems in No. 1 have been received as follows:

From J. M. Arnold, 52; R. W. Ryan, 52; Prof. A. B. Evans, 54, 55 & 58; Edgar Frisby, 56; E. S. Farrow, 51, 52, 53, 54, 55, 56, & 57; J. M. Greenwood, 54 & 56; Henry Gunder, 52, 56 & 58; G. W. Hill, 55 & 56; Prof. E. W. Hyde, 58; H. Heaton, 52, 53, 56, 57 & 58; Phil. Hoglan, 52; Prof. W. W. Johnson, 58; Artemas Martin, 52 & 56; O. D. Oathout 52 & 56; E. B. Seitz, 52, 54, 56, 57 & 58; Walter Siverly, 52, 54 & 56 Werner Stille, 54 & 56.

The following credits, due, were omitted, by an oversight, in the January No. Prof. J. Scheffer, 41, 42, 43, 44, 47 & 49; E. B. Seitz, 41, 43, 44, 45 & 48; L. Regan, 41, 42, 43 & 45; August Zielinski, 43 & 45. Also, Th. L. De Land, in addition to the solutions for which he was credited in the Jan. No., sent a correct and very elegant solution of 48.

It must not be inferred that, when solutions are not selected for publication, they are thought *unworthy.* On the contrary, many solutions that are not published are among the very best that we receive, and are passed, in making our selections, because our space will not permit us to introduce the details which they contain. For instance, we have on hand very elegant solutions of No. 48, by Prof. Hyde, Prof. Evans and Prof. Johnson, but, at this time, our space will not permit us to publish them. Although very brief, it is believed that the published solution of 58, and also that of 54, will be found sufficient to guide the student in making out a solution in detail if he desires it.